

Conference Abstract

Improving data availability with “OBIS-ENV-DATA”: Examples from OBIS-USA

Abigail Benson ‡

‡ U.S. Geological Survey, Colorado, United States of America

Corresponding author: Abigail Benson (albenson@usgs.gov)

Received: 11 Aug 2017 | Published: 11 Aug 2017

Citation: Benson A (2017) Improving data availability with “OBIS-ENV-DATA”: Examples from OBIS-USA. Proceedings of TDWG 1: e20207. <https://doi.org/10.3897/tdwgproceedings.1.20207>

Abstract

During biological sampling events, measurements are routinely collected about the event as well as about the biological observations. For example, the same sampling event might collect event measurements like water temperature and salinity as well as biological measurements like abundance and weight. Keeping these measurements together is important to be able to assess how species might be responding to changes in their environment and to be able to make predictions into the future. However, the implementation of Darwin Core utilized on the Integrated Publishing Toolkit (IPT), open-source software developed and supported by the Global Biodiversity Information Facility (GBIF), did not have a way to capture both of these types of measurements. The Ocean Biogeographic Information System (OBIS) formed a working group to explore this problem, and they developed and published a simple solution to the issue of keeping environmental data values collected along with the biological data in a common structure. Their solution, called “OBIS-ENV-DATA”, uses the event core implementation of Darwin Core in the IPT and adds an extended measurement or fact extension to include both environmental measurements and biological measurements. The Extended Measurement Or Facts extension is currently a registered extension for IPT and available for anyone to use. The Ocean Biogeographic Information System-USA (OBIS-USA) node decided to switch from using the occurrence core implementation of Darwin Core in the IPT to using “OBIS-ENV-DATA” and have been impressed with the results of that decision. Information that was frequently left out when aligning marine biological sampling data with occurrence core, can

now be included in our submissions to OBIS and GBIF via IPT. OBIS-USA has several use cases to that demonstrate how additional information has been made accessible through “OBIS-ENV-DATA” and new opportunities for data analysis.

Keywords

sampling events, measurement or facts, OBIS

Presenting author

Abigail Benson